

SITE 300



Site 300 is an experimental test site situated on 7,000 acres in rural foothills located approximately six miles southwest of downtown Tracy and 15 miles southeast of Livermore.

Site 300 was established in 1955 as a non-nuclear explosives test facility to support Lawrence Livermore National Laboratory's national security mission.



The Contained Firing Facility at Site 300.

Work conducted at Site 300 supports the Lab's nuclear weapons program by assessing the operation of non-nuclear weapon components using hydrodynamic testing and advanced diagnostics, such as high-speed optics and X-ray radiography. These efforts support the nation's Stockpile Stewardship Program (SSP), which is

designed to ensure the safety, security and effectiveness of the U.S. nuclear weapons stockpile.

Science and technology

Site 300 operates several facilities for synthesis, formulation, and processing of explosives, including pressing, machining, precision inspection of machined parts, and assembly of test components. Additional operations include non-destructive testing related to the SSP and other programs where components are subjected to vibration, shock, drop and temperature controlled tests.

Site 300 also operates the world's largest indoor firing facility, the Contained Firing Facility (CFF), which became



Machine fabricating



CFF target chamber

operational in 2000. The concrete-reinforced, 28,000-square-foot CFF facility is designed to minimize offsite impacts, such as minor blast pressure and noise to neighbors and debris to the on-site environment. Tests in the CFF can include hydrodynamic tests, which involve explosive detonations that create temperatures and pressures so great that solids behave like

liquids. These tests use replacement metals, or surrogate materials, such as steel, copper and depleted uranium in place of substances that would actually be used in a nuclear weapon.

SITE 300 – LAWRENCE LIVERMORE NATIONAL LABORATORY

People



Site 300 employs approximately 190 people, with expertise in such fields as engineering, chemistry, biology and environmental restoration. In addition to its scientific and technical staff, the site also has a fire station, security force, and administrative and facility support personnel.

Throughout its more than 50 years of operation, Site 300 has maintained an outstanding safety and security record.

All employees and contractors requiring access to the site must undergo site-specific safety training. Site security is maintained by stringent access controls, including armed security personnel.

Site 300 gets its name from the early days of Lawrence Livermore, when the main laboratory was called Site 200 and the test facility Site 300 (Lawrence Berkeley National Laboratory was Site 100).

Environment



Site 300's unique environmental qualities include its large plant and wildlife population, including rare and endangered plants such as *Amsinckia grandiflora*. Noted wildlife includes federally threatened species like the Alameda whipsnake and California red-legged frog, raptors such as the golden eagle and the red-tailed hawk, and many varieties of small birds. Access to these unique populations is controlled, and site operations have successfully co-existed with them for more than 50 years.



In keeping with its commitment to sound environmental stewardship, the Laboratory, in cooperation with the U.S. Department of Energy, U.S. Environmental Protection Agency (EPA) and other regulatory agencies, has been carefully restoring portions of Site 300 contaminated by past releases of chemicals from early program activities. This soil and groundwater contamination, first detected in shallow aquifers onsite in the early 1980's, led to Site 300 being placed on EPA's National Priorities List (Superfund program) in 1990. Significant progress has been made in ensuing years to restore these areas to acceptable regulatory levels.



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